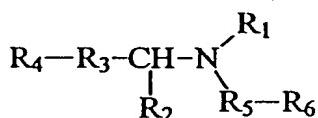


CLAIMS

1. A method for treating a subject for glaucoma, comprising:
administering a therapeutically effective amount of a deprenyl compound to a
5 subject such that the subject is treated for glaucoma.

2. The method of claim 1, wherein the deprenyl compound is represented by the structure:



10 in which

R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl;

R₂ is hydrogen or alkyl;

R₃ is a single bond, alkylene, or -(CH₂)_n-X-(CH₂)_m;

15 in which X is O, S, or N-methyl; m is 1 or 2; and n is 0, 1, or 2;

R₄ is alkyl, alkenyl, alkynyl, heterocyclyl, aryl or aralkyl; and

R₅ is alkylene, alkenylene, alkynylene and alkoxyethylene; and

R₆ is C₃-C₆ cycloalkyl or

—C≡CH ; or

20 R₂ and R₄-R₃ are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group;

and pharmaceutically acceptable salts thereof.

3. The method of claim 2, wherein R₁ is a group that can be removed *in vivo*.

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4. The method of claim 2, wherein R₁ is hydrogen.

5. The method of claim 2, wherein R₁ is alkyl.

30 6. The method of claim 5, wherein R₁ is methyl.

7. The method of claim 2, wherein R₂ is methyl.

8. The method of claim 2, wherein R₃ is methylene.

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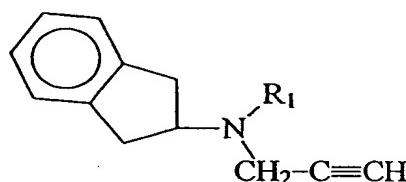
9. The method of claim 2, wherein R₄ is aryl.

10. The method of claim 2, wherein R₄ is phenyl.
11. The method of claim 2, wherein R₅ is methylene.
- 5 12. The method of claim 2, wherein R₆ is



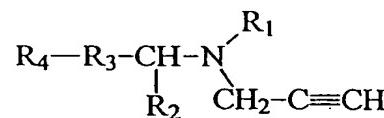
13. The method of claim 2, wherein the deprenyl compound has the structure

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wherein R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl.

- 15 14. The method of claim 2, wherein the deprenyl compound is represented by the structure:



in which

- 20 R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl;

R₂ is hydrogen or alkyl;

R₃ is a bond or methylene; and

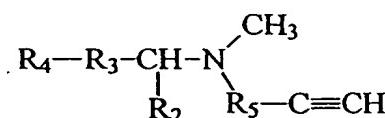
R₄ is aryl or aralkyl; or

- 25 R₂ and R₄-R₃ are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group;

and pharmaceutically acceptable salts thereof.

15. The method of claim 2, wherein the deprenyl compound is represented by the structure:

30



in which

R₂ is hydrogen or alkyl;

R₃ is a bond or methylene; and

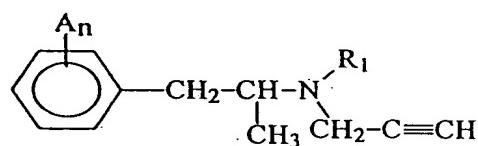
R₄ is aryl or aralkyl; or

5 R₂ and R₄-R₃ are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group; and

R₅ is alkylene, alkenylene, alkynylene and alkoxylen;

and pharmaceutically acceptable salts thereof.

10 16. The method of claim 2, wherein the deprenyl compound is represented by the structure:



in which

15 R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl;

A is a substituent independently selected for each occurrence from the group consisting of halogen, hydroxyl, alkyl, alkoxy, cyano, nitro, amino, carboxyl, $-CF_3$, or azido;

n is 0 or an integer from 1 to 5;

20 and pharmaceutically acceptable salts thereof.

17. The method of claim 1, wherein the deprenyl compound is (-)-deprenyl.

18. The method of claim 1, wherein the deprenyl compound is (-)-pargyline.

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19. The method of claim 1, wherein the deprenyl compound is (-)-desmethyldeprenyl.

20. A kit comprising a container of a deprenyl compound and instructions for administering a therapeutically effective amount of the deprenyl compound to a subject such
30 that the subject is treated for glaucoma.